

**Remarks of
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“Learning from History: Looking Back to Look Forward”

**National Emergency Number Association
9-1-1 Goes to Washington Critical Issues Forum
Arlington, Virginia
March 7, 2006**

[As prepared for delivery]

Thank you David for that kind introduction. It really is a privilege to be here with you today. I truly have enjoyed my relationship with NENA since I joined the Commission in late 2002. You have been blessed with such great leadership over the past several years – Bill, Richard, John and now David and I think that it is no coincidence that we have seen so many great strides during that time for the continued deployment of E911 services.

Learning from History

Some of you may know that I am actually an Historian by training. So I very much appreciate the value of looking back before we look forward. And I have tried to rely on lessons learned in the past in setting communications policy for the future. And the role of history is arguably most profound when it comes to dealing with issues of public safety and E911.

In that vein, I wanted to start off today with a little history lesson – something I have not done since I was a teaching assistant in grad school. Some of you may not be aware that the sinking of the Titanic in 1912 played a significant role in starting a string of legislation that ultimately led to the formation of the Federal Communications Commission in 1934.

The supposedly "unsinkable" Titanic was equipped with a state-of-the-art Marconi radio system, a four-wire antenna hoisted 250 feet in the air between the ship's masts, and even a battery powered emergency transmitter. There was a guaranteed transmission range of 250 miles for the system, but at night transmissions could go up to 2000 miles. There were two operators manning the radio room and round the clock coverage was put in place. One interesting footnote is that Marconi himself and his wife actually accepted an invitation to sail on the ship's maiden voyage from Southampton, but ultimately did not make the trip.

Throughout Sunday, April 14, 1912, the Titanic had been warned several times by neighboring ships about the presence of icebergs in the area. While there is some dispute about the specific distance, it is believed that one nearby steamer, SS Californian, was as close as 10 miles away. The operator manning the Californian's radio room notified the Titanic of ice in the area at 11:00 pm, but went to sleep a few minutes later after being told by the Titanic radio crew to stop contacting them so that they could focus on passenger messages.

The Titanic struck an iceberg just before midnight on April 14. It was later learned that during the two hours from the first distress call until the radio operators abandoned the radio room they sent 30-35 messages, which were heard as far away as Italy; but not by the Californian, because the radio operator had gone off duty. The signal was heard by the SS Carpathia, which was almost 60 miles away from the Titanic crash site. The Carpathia raced to the Titanic at full steam and arrived roughly four hours after the crash and began rescuing the surviving passengers.

Needless to say, the sinking launched a series of investigations by government officials on both sides of the Atlantic. Later that year, Congress passed the Radio Act of 1912, which greatly expanded previously narrow Government oversight over wireless communications at the time. The Act put in place a number of procedures regarding emergency communications including a requirement for 24-hour radio service by all seafaring vessels.

The Radio Act of 1912 was followed by the Radio Act of 1927 and the creation of the Federal Radio Commission to deal with the expanding broadcasting industry. Because of various problems with both laws, Congress passed the Communications Act of 1934 and replaced the FRC with the Federal Communications Commission.

As I like to regularly point out – the opening section of the 1934 Act establishes the FCC “for the purpose of promoting safety of life and property through the use of wire and radio communication.”

Learning from the Deployment of Wireless E911

As a life-long public servant, I take these words to heart, and have tried to routinely apply them during my time at the Commission. Every day, we confront issues at the FCC that can affect billions of dollars by major players in these industries. But to me, there is no higher calling or higher priority for us at the Commission than improving 911 and E911 services, and it has been a real privilege to work with many of you on this important objective. You in the public safety community are on the front lines of keeping our country and our people safe. You deserve our ongoing thanks and support.

When I first joined the FCC in late 2002, much of our attention was rightly focused on problems with wireless E911. I think we would all agree that the deployment of wireless E911 had a fitful start. It was based on new and unproven technologies. And it required the unprecedented cooperation of a wide range of players – wireless carriers, PSAPs, equipment and technology vendors, local exchange carriers, state utility commissions and local governments. Looking back, though, I think many would agree the ball was dropped on occasion.

But things have really turned the corner. Three years ago, I testified before Congress that Phase II service had been deployed to only 300 PSAPs in 16 states. Today, Phase II is deployed to over 3300 PSAPs across the entire country. And while we still need to work with many carriers to reach the 95% handset penetration level, the good news is that tens of millions of GPS-enable handsets have been sold and are in service today.

Of course, we cannot rest on our laurels. There are still PSAPs without Phase II or even Phase I service. The FCC must continue its work with these PSAPs, the carriers, and others in support of the E911 deployment. We must ensure that wireless carriers continue to do what they can to promote deployment efforts and will invoke our enforcement authority when appropriate. We must also work with rural wireless carriers who are facing issues with location accuracy and limited access to the latest equipment; we want to keep these carriers on the path to E911 compliance so that no one gets left behind.

And in an issue that I know is important of many of you, we solicited the help of the FCC's Network Reliability and Interoperability Council to look at some of the technical issues associated with E911, such as location accuracy. I understand that this has been a challenging process, but the dialogue is healthy and the outcome will inevitably help advance the mission of better and more advanced wireless E911 services.

Of course, NENA has stepped up as well. NENA's leadership was instrumental in the passage of the ENHANCE 911 Act of 2004, which creates a national 911 Program Office and also authorizes up to \$250 million per year for five years for PSAP grants to upgrade communications systems. While Congress has not yet provided funding for grants, NENA worked hard and won a provision in the DTV Transition Act to provide \$43.5 million in funding once the FCC holds the 700 MHz spectrum auction.

And both NENA and the FCC have also improved our level of collaboration with legislators on Capitol Hill. A great deal of credit goes to Senator Burns, Senator Clinton, and Representatives Shimkus and Eshoo, who had the vision to launch the Congressional E911 Caucus. And they have been tireless advocates for full funding of the 911 Program Office and the ENHANCE 911 Act grant program.

I have also had the opportunity to participate in a number of events hosted by the Caucus and the E911 Institute and its executive director Greg Rohde. Events like tomorrow night's 911 Honors are critical to promoting public education on E911, and emergency communications issues in general. And I want to congratulate my friend and colleague, Chairman Kevin Martin, on receiving the well deserved "Federal Government Leader" award for his excellent work on E911 issues during the past year.

Applying Lessons Learned to VOIP

Our work on wireless E911 is not done, but we are seeing progress. We have learned from our mistakes and have really made great strides over the past few years.

That is why I was so troubled by a couple of Commission decisions in 2004 regarding Voice over IP or VOIP services. I was afraid that we were not looking back enough on our lessons learned from wireless E911 before we looked forward to deal with the issue of VOIP and its ability to provide E911 services.

History has shown us that in dealing with new technologies like VOIP or cellular and PCS or even wireless telegraph, we cannot let public safety concerns slip. We needed to keep the

spotlight on emergency communications, even as we got excited about these new technologies, but we did not do so at the time.

I was frustrated because it seemed that the Commission was so blinded by the technology that we never sent a clear message about our expectations for E911 in a VOIP world. My staff and I worked hard to improve these items to highlight the issue of consumers and their expectations for 911 with those Internet-based communications that function just like plain old telephone service.

In one decision that year, the FCC blocked the State of Minnesota from requiring a VOIP provider to file a plan for compliance with public safety laws, including 911 obligations, before it could provide service. At the time, I expressed my concern “that [the FCC’s] approach of overriding States’ public safety efforts without clear federal direction takes us into a dangerous territory. We can’t afford to let consumers come to rely on services without the benefit of the critical safety net that they have come to expect.”

But we did just that. The Commission took the tools out of the hands of the States and set them aside. And customers paid the price. You have heard the tragic stories just like we did.

That is why I was so pleased to work with Chairman Martin and my fellow Commissioners on our decision in the summer of 2005 to impose E911 obligations on VOIP providers. This Order truly reaffirms the FCC’s commitment to “promoting safety of life and property” as charged in the opening provision of the 1934 Act.

I appreciate the argument that VOIP should be allowed to develop and flourish. All indicators suggest that the IP-based services, like VOIP, are rapidly becoming the building block for the future of telecommunications. These services promise a new era of consumer choice, and we must continue to promote the deployment of new technologies.

At the same time, we cannot let our desire to see VOIP proliferate come at the cost of providing the best emergency services available today, nor can we afford to take any steps backward. We must make certain that any “hands off” treatment does not mean we are undercutting the safety of consumers. We need to carefully balance these considerations. Given how far this technology has developed already, we could no longer afford to just sit back and watch. History has taught us that we need to get the policy structure right from the start and find solutions together to ensure that emergency services continue to be rolled out as quickly as possible, whether circuit or IP-based. We learned our lesson in the wireless E911 world, and we needed to get out front of the challenge when it came to VOIP services. We lost the chance in 2004, and fortunately got it back in 2005.

Through our decision, we set tight deadlines for VOIP providers to offer 911 capabilities to their consumers. I recognize that there have been challenges in meeting these deadlines, but we must keep the pressure on all parties involved to ensure that these providers truly are on a path to compliance. The past has shown us that we do not make progress on public safety by being complacent.

Looking forward, it is critical that we continue to let consumers know that there still may be limitations associated with the E911 functionality through some VOIP services. We must inform the public that power outages, loss of a consumer's broadband connection, or the time needed to update E911 location databases may affect a consumer's ability to reach public safety through 911. And we explore these issues in a Further Notice.

I believe that IP-based services ultimately hold great promise for E911. I appreciate the efforts that NENA and those in the VOIP industry have made to develop innovative solutions for 911 services and encourage these industry participants to continue their efforts. NENA should be commended for its work on publishing the I-2 Interim VOIP E911 standard this past December. And I understand that an I-3, Next Generation 911 standard should be out for comment by the end of the second quarter of this year.

By all accounts, these next generation capabilities have huge potential to improve on emergency response and medical monitoring services with video and other capabilities that will help PSAPs and first responders. These are innovations that will truly make everyone safer. In the meantime, history has taught us that it is the Commission's duty to direct VOIP providers to do more now to ensure that all Americans will have access to 911 when they need it.

Conclusion

So we have got a lot of challenges ahead of us – whether it is continuing our good work on wireless E911 or tackling new frontiers like VOIP. With leadership like the folks here in the room today, though, I am certain we can get the job done. And I think our work together over the past few years bears this out.

And I am pleased that NENA is taking such a leadership role on the migration to next generation 911 systems. I understand that final report of your 2005 Next Generation E911 Program is available at this event. I think NENA members would do well in my history class. You look to the past before you begin to look forward. And the FCC will be right there with you. As I hope you have learned today, the FCC's history is indelibly linked with the responsibility of promoting public safety.

Thank you for the opportunity to be with you today.